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BEFORE THE ARIZONA CORPORATION COMMISSION

GARY PIERCE
Chairman
BOB STUMP
Commissioner
SANDRA D. KENNEDY
Commissioner
PAUL NEWMAN
Commissioner
BRENDA BURNS
Commissioner

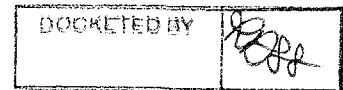
IN THE MATTER OF THE APPLICATION
OF TRICO ELECTRIC COOPERATIVE,
INC. FOR APPROVAL OF ITS
2011 RENEWABLE ENERGY STANDARD
TARIFF IMPLEMENTATION PLAN

DOCKET NO. E-01461A-10-0263
DECISION NO. 72086
ORDER

Arizona Corporation Commission
DOCKETED

JAN 20 2011

Open Meeting
January 11 and 12, 2011
Phoenix, Arizona



BY THE COMMISSION:

FINDINGS OF FACT

1. Trico Electric Cooperative, Inc. ("Trico" or "Company") is certificated to provide electricity as a public service corporation in the State of Arizona.

Background

2. On July 1, 2010, Trico filed the 2011 Renewable Energy Standard Tariff ("REST") Implementation Plan ("2011 REST Plan") in compliance with Arizona Administrative Code ("A.A.C.") R14-2-1801 through R14-2-1816. On September 30, 2010, Trico filed a supplement to its proposed 2011 REST Plan. In previous years, Arizona Electric Power Cooperative, Inc. ("AEPCO") has filed REST Plans on behalf of its Arizona member distribution cooperatives. The most recent REST Plan filed by AEPCO, the 2010 Restated REST Plan filed on November 6, 2009, was filed on behalf of three of its distribution cooperatives. The three distribution cooperatives were Duncan Valley Electric Cooperative, Inc. ("Duncan Valley"), Graham County

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1 Electric Cooperative, Inc. ("Graham County"), and Trico Electric Cooperative, Inc. ("Trico").
2 Each cooperative has filed its own REST Plan for 2011.

3 **The 2011 REST Plan**

4 **The SunWatts Green Energy Purchase Program**

5 3. According to Trico, it will continue to offer this voluntary program in which retail
6 customers can choose to support renewable energy by purchasing blocks of "green energy." The
7 retail customers can purchase 50 kilowatt-hour ("kWh") blocks of green energy at a cost of \$2.00
8 per block.

9 **The SunWatts Residential and Commercial Rebate Program**

10 4. The SunWatts rebate program, offered in compliance with R14-2-1809, provides
11 incentives to customers for installation of qualifying renewable systems. For photovoltaic ("PV")
12 and small wind systems, the Cooperatives would pay Up-Front Incentives ("UFIs") of \$1.50 per
13 installed watt, up to 30 percent (30%) of the total cost of the system, for systems up to 10 kW in
14 size. In addition, customers with PV or small wind systems up to 10 kilowatt ("kW") in size will
15 also have the option of receiving a Production Based Incentive ("PBI") in the amount of
16 \$0.068493 per kWh over a ten-year period.

17 5. Trico states that should the budgeted amount of funds for UFIs be exhausted,
18 customers will continue to have the option of receiving PBIs or being placed on the reservation
19 waiting list under the 2011 REST Plan. Further, for PV and small wind systems up to 10 kW in
20 size, Trico will own all the Renewable Energy Credits ("RECs") from a system's actual or
21 estimated kWh generation over a 20-year period. Trico would provide PBIs for PV and wind
22 systems greater than 10 kW but smaller than 1 megawatt ("MW") in size, not to exceed \$0.10 per
23 kWh, on a first-come first-serve basis. Further, PV and wind systems greater than 10 kW but
24 smaller than 1 MW in size will be subject to a competitive selection process, and projects will be
25 chosen on a quarterly basis. If a project is not selected, it can be resubmitted in a subsequent
26 quarter.

27 6. For residential solar water heating systems, Trico would provide a UFI of \$0.40 per
28 kWh of energy saved during the system's first year of operation, based on the OG-300 ratings of

the Solar Rating and Certification Corporation. After accounting for and applying all federal and state incentives, the customer contribution to the solar water heating project cost would not be less than 15 percent of the total project cost. Incentives paid for solar water heaters would be distributed on a first-come first-serve basis until funds are no longer available. System installations would be required to be performed by licensed renewable energy contractors, electricians, or plumbers (in the case of solar water heaters). Trico may permit self-installations only if the installation has been inspected and verified by a licensed contractor.

7. The table below illustrates the incentive levels provided for PV, small wind, and solar water heating proposed in Trico's 2011 REST Plan.

Technology	UFI	PBI
Solar Electric	\$1.50/watt for systems up to 10 kW (up to 30%)	\$0.068943/kWh (up to 30%) for systems up to 10 kW over a 10 yr period \$0.10/kWh for systems >10 kW up to 1MW
Small Wind	\$1.50/watt for systems up to 10 kW (up to 30%)	\$0.068943/kWh (up to 30%) for systems up to 10 kW over a 10 yr period \$0.10/kWh for systems >10 kW up to 1MW
Solar Water Heating	\$0.40 per kWh for first year savings	N/A

8. Should Trico receive a request for a new technology not included in Table 1 above, Trico would follow the program process guidelines of the Uniform Credit Purchase Program ("UCPP") working group recommendations. Staff recommends that, if the Commission approves a UCPP, that Trico should be required to develop a mechanism to incorporate UCPP procedures and incentive levels for all eligible technologies in its proposed REST Plans for later years. To the extent that Trico believes that different incentive levels than those of the UCPP are justified, particularly in remote, rural areas, Trico could develop such proposals.

9. As part of the AEPCO 2010 Restated REST Plan (pursuant to Decision No. 71451), Trico offered UFIs of \$3.00 per installed watt, up to 40 percent of the total cost of the system, for systems up to 10 kW in size for PV systems. On December 10, 2010, in Decision No. 72021, the Commission granted Trico approval to reduce its UFIs for PV systems to \$1.75 per installed watt, up to 30 percent of the total coast of the system, for systems up to 10 kW in size.

Technology	UFIs
Solar Electric	\$3.00 per watt up to 10 kW
Small Wind	\$3.00 per watt up to 10 kW
Solar Water Heating	\$0.75 per kWh for first year savings

10. Currently, Trico offers UFIs for small wind systems of \$3.00 per installed watt, up to 40 percent of the total cost of the system, for systems up to 10 kW in size. For solar water heaters, Trico offers UFIs of \$.075 per kWh for first year savings. In addition, Trico currently offers the following incentives for the following renewable technologies under the AEPCO 2010 Restated REST Plan: Biomass, Biogas, Daylighting, and Solar Space Cooling.

11. The rebate for the Daylighting program is \$0.20 per kWh saved during the first year. The Biomass, Biogas, and Solar Space Cooling programs offer PBIs paid for RECs over a 20-year period for actual measured output. The following incentives are applied to the Biomass/Biogas technologies: \$0.054 per kWh for electric generation, \$0.031 per kWh for CHP-electric, \$0.016 per kWh for CHP-thermal, \$0.013 per kWh for thermal, and \$0.029 per kWh for cooling. The Solar Cooling PBIs are for 20 years at \$0.115 per measured kWh. In addition, Trico offers the following PBIs for Geothermal technology: \$0.022 per kWh for geothermal-electric and \$0.043 per kWh for geothermal-thermal. The Geothermal program offers PBIs paid for RECs over a 20-year period for actual measured output.

12. The following larger distributed generation projects are currently under consideration for rebate support:

Continental Schools Solar Project, Green Valley-Trico, Continental School District #39, and Continental Energy, LLC, entered into an agreement in which Trico purchases the RECs produced by a 346 kW PV system installed on the school's parking structure.

WAATS Solar Project, Marana-The Arizona Department of Emergency and Military Affairs, Western Army National Guard Aviation Training Site ("WAATS") plans to install an additional 13 kW PV array to its existing system located at its WAATS Facility in Marana. The total system output would increase from 82 kW to 95 kW. Trico would purchase the RECs pursuant to an existing agreement in which this installation is the final phase of the project.

1 **The SunWatts Large-Scale Renewable Program**

2 13. Trico would participate in the development of large-scale renewable resources
3 which may include large commercial renewable projects of 1 MW or more, purchase power
4 agreements, or construction of utility-owned resources. For its City of Tucson Solar Project, Trico
5 and AEPCO are collaborating with the City of Tucson to develop a 1 MW PV plant located in the
6 Avra Valley area. The parties are currently finalizing a PBI REC purchase agreement with the
7 City of Tucson.

8 **SunWatts Habitat for Humanity Program**

9 14. Trico would continue its partnership with Habitat for Humanity to offer renewable
10 energy options to low-income housing in its service area. Trico would provide grants to the
11 Habitat organization to purchase PV and other renewable energy equipment to be installed on
12 Habitat homes. In addition, Trico would assist in finding local renewable energy equipment
13 dealers who would be willing to donate products and services.

14 **SunWatts Educational Grant Program**

15 15. Trico would continue to offer teachers in its service territory an education grant for
16 the development of renewable curricula for the classroom.

17 **SunWatts Sun Farm Community Solar Demonstration Project ("SunWatts Sun Farm")**

18 16. Trico states that on July 1, 2010, its application for grant funding was accepted by
19 the Arizona Commerce Authority ("ACA") through the U.S. Department of Energy's American
20 Recovery and Reinvestment Act ("ARRA") for funding a community solar project located at the
21 Trico headquarters. The funding was approved in the amount of \$933,458. This project is
22 designed to make solar energy accessible for renters and homeowners who cannot site a solar
23 system or who do not have the capital to fund or otherwise finance their own unit.

24 17. The proposed SunWatts Sun Farm is a voluntary program that would consist of 840
25 ground mount fixed tilt panels that total to 227 kW. A Trico customer would be able to purchase
26 the output of the panels in one quarter, one half, or in full panel increments up to but not to exceed
27 their average monthly usage or 10 kW, whichever is less.

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1 18. Customers who participate would receive a credit on their bill equal to the energy
2 generated by their partial panel or panel(s). Trico has calculated the price for each full panel
3 would be \$920 (\$230 for a quarter panel and \$460 for a one-half panel), which approximately
4 equates to the average cost of a 5,198 watt rooftop system after accounting for all federal, state,
5 and utility rebates. The cost of the panel would be paid by the customer to Trico in a one-time
6 upfront payment.

7 19. Trico has also proposed its SunWatts Sun Farm Tariff which would be available to
8 residential and small commercial customers. The proposed tariff would require that a customer
9 enter into a contract for a term of 20 years that sets out the rights and obligations associated with
10 the purchase of the output of a partial panel or full panel(s). Trico intends to use all funds
11 collected in association with the proposed tariff for future expansion of the SunWatts Sun Farm,
12 and all costs associated with the SunWatts Sun Farm would be passed through in the purchase
13 price of the panels. Trico does not intend to have any costs associated with the SunWatts Sun
14 Farm or any potential future expansion of the SunWatts Sun Farm paid through the REST
15 surcharge. In addition, Trico is proposing to include the annual kWh output of the SunWatts Sun
16 Farm as distributed generation.

17 **Tariffs**

18 20. Staff has reviewed Trico's proposed RES Tariff which was filed with the 2011
19 REST Plan. Trico's proposed RES Tariff sets forth the surcharge rates and monthly maximums to
20 be collected to fund its annual budget for 2011. The proposed tariff includes a surcharge of
21 \$0.001411 per kWh for governmental and agricultural members/customers, which is a decrease
22 from the current REST surcharge of \$0.001663.

23 21. The proposed monthly maximum for governmental and agricultural
24 member/customers is \$43.00. For residential and non-residential members/customers, Trico is
25 proposing a surcharge of \$0.008065 per kWh, which is a decrease from the current REST
26 surcharge of \$0.009477. Trico is proposing to reduce the kWh surcharge in an effort to lower the
27 impact on low use customers.

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22. The proposed monthly maximum for residential members/customers is \$3.00. Trico is proposing a \$130.00 monthly maximum for non-residential members/customers. For non-residential members/customers whose demand is 3 MW or more for three consecutive months, the proposed monthly maximum is \$3,500. The proposed kWh surcharges and monthly maximums ("caps") for Trico's proposed tariff, compared to the current REST maximums, are:

Customer Class/Category	Current		Proposed	
	Existing Surcharges	Existing Maximums	Proposed Surcharges	Proposed Maximums
Governmental & Agricultural	\$0.001663	\$24.70	\$0.001411	\$43.00
Governmental & Agricultural >3MW	\$0.001663	\$74.10	n/a*	n/a*
Non-Residential	\$0.009477	\$74.10	\$0.008065	\$130.00
Non-Residential >3MW	\$0.009477	\$222.30	\$0.008065	\$3,500.00
Residential	\$0.009477	\$2.00	\$0.008065	\$3.00

*Trico did not include a separate rate for Governmental & Agricultural >3MW customers in its 2011 Plan.

23. The following table provides examples of sample Trico customers and the impact customers can expect to see.

Monthly Bill Impact				
Sample Customers	Average kWh	Current REST	Proposed REST	Difference
Residential Customer	950	\$2.00	\$3.00	\$1.00
Convenience Store	17,360	\$74.10	\$130.00	\$55.90
Elementary School	60,288	\$24.70	\$43.00	\$18.30
Grocery Store	260,160	\$74.10	\$130.00	\$55.90
Farm	21,200	\$24.70	\$29.91	\$5.21
Town of Sahuarita	47,640	\$24.70	\$43.00	\$18.30

24. Trico has estimated that its proposed RES Tariff would collect the following funds, by customer class:

RES Tariff Funding from Proposed Surcharge

	Total \$
Governmental & Agricultural	\$5,220
Non-Residential	\$838,379
Non-Residential >3MW	\$42,000
Residential	\$1,114,590
Total	\$2,000,189

25. Trico is also proposing to introduce its SunWatts Sun Farm Tariff. According to Trico, the proposed tariff would be available to all customers on the RS1, RS1TOU, GS1, GS2, and GS3 rate schedules who wish to participate in the SunWatts Sun Farm program. The funds collected associated with the SunWatts Sun Farm would be used for future expansion of the SunWatts Sun Farm through construction of additional panels.

26. SunWatts Sun Farm panels would be available to customers on a first-come first-serve basis until full output of the Farm is assigned. Participants would be required to complete an application and once awarded panel output, the customer would then enter into a 20-year purchase contract with Trico. According to Trico, during the life of the contract, a customer would receive a credit of approximately 1,600 kWh per year. This credit would be applied to the customer's monthly bill over the life of the contract. The customer would be able to purchase the output from PV panels in one quarter, one half, or full panel increments. The customer would be billed the full cost of the panel size contracted for as a one-time up-front charge. The pricing for the panel increments are shown below.

Panel Size	Cost
Quarter Panel	\$230.00
Half Panel	\$460.00
Full Panel	\$920.00

27. Trico also filed an updated Voluntary Renewable Standard Program Tariff and Renewable Energy Customer Self-Directed Tariff.

Budget

28. According to Trico, the funding from the RES surcharge is estimated to be a total of \$2,000,189. In the proposed budget, Trico has allocated approximately \$249,110, or 12.5 percent of the total funds collected on administrative, advertising, and R&D expenses. However, Trico has indicated that no R&D is scheduled for 2011.

28. In addition, Trico is proposing to allocate a portion of the proposed 2011 REST budget to help eliminate the current backlog of the reservation waiting list for rebate payments. In its original application, Trico had allocated \$825,354 of the proposed 2011 REST budget toward the reservation waiting list. However, in its supplemental filing, Trico indicated that it had been awarded \$200,000 in additional ARRA funding to reduce the backlog for residential PV applications. In addition, Trico states that it has received four significantly sized commercial project applications. Trico is therefore proposing to reallocate \$206,338 of its proposed budget for the reservation waiting list to the non-residential budget for PBIs.

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29. The budget to reduce the residential reservation waiting list backlog would decrease from \$825,354 to \$619,016 and the proposed budget for non-residential PBIs would increase from \$268,785 to \$475,124. The proposed reallocation would allow Trico to fund at least one of the non-residential project applications for rebate payments. Trico states that the award in ARRA funding would offset the shift in funds to the non-residential budget and still allow Trico to continue to reduce the current reservation waiting list backlog. The total proposed 2011 REST budget would remain unchanged despite the reallocation of funds.

30. The table below indicates Trico's original proposed 2011 REST budget compared to the proposed revised 2011 REST budget from the supplemental filing:

Category	\$ Amount of Original Total Budget	\$ Amount of Revised Total Budget
Residential DG PV UFI	\$546,408	\$546,408
Residential DG PV PBI	\$32,783	\$32,783
Residential Solar Water Heaters	\$25,248	\$25,248
Non-Residential DG PV UFI	\$45,000	\$45,000
Non-Residential DG PBI	\$268,785	\$475,124
Amount used to reduce backlog	\$825,354	\$619,016
Total Rebate Budget	\$1,743,578	\$1,743,579
Educational Grant Program	\$2,500	\$2,500
Habitat for Humanity Program	\$5,000	\$5,000
Administration, Advertising, and R&D	\$249,110	\$249,110
Total	\$ 2,000,188	\$ 2,000,189
**Trico has been awarded funding from the ACA through the US Department of Energy's ARRA:		
Funds to help reduce the backlog for residential PV installations	N/A	\$200,000
Funds for the proposed SunWatts Sun Farm	N/A	\$933,458

Staff's Review of the Trico 2011 REST Plan

31. Staff has reviewed Trico's proposed 2011 REST Plan. Staff believes the proposed 2011 REST Plan should be approved. Staff believes that the decrease in incentives for systems eligible for UFIs is appropriate at this time and will help Trico support more systems with the 2011 funds.

32. Trico is proposing to include the annual kWh output from the SunWatts Sun Farm as distributed generation. Staff believes that the resources developed under the SunWatts Sun Farm would not qualify as distributed generation. A.A.C. R14-2-1802(B) describes Distributed Renewable Energy Resources as applications of defined technologies "that are located at a

customer's premises" that displace conventional energy resources. The Trico SunWatts Sun Farm does not propose electric generation to be sited at a customer's premises. Therefore, Staff does not believe that the output from the SunWatts Sun Farm should be included as distributed generation. In addition, Staff believes that Trico's proposed budget of \$2,000,189 for 2011 is appropriate and will assist in meeting the REST Rules requirements.

Recommendations

33. Staff has reviewed Trico's proposed tariffs and finds that they are consistent with A.A.C. R14-2-1808 and R14-2-1809(A). Staff has recommended the following:

- Approval of the Trico 2011 REST Plan as discussed herein;
- Trico file a revised Renewable Energy Standard Tariff, Voluntary Renewable Energy Standard Program Tariff, Renewable Energy Customer Self-Directed Tariff, and SunWatts Sun Farm Tariff consistent with the Decision in this matter within 15 days of the effective date of the Decision;
- That Trico specify in its SunWatts Sun Farm Tariff the amount of the annual kWh credit to be received by customers who participate in the program; and
- That the annual kWh output from the SunWatts Sun Farm not be included as distributed generation per A.A.C. R14-2-1802(B).

34. Staff has reviewed the Trico 2011 REST Plan and Staff believes that the proposed 2011 REST Plan will help Trico meet the requirements of the REST Rules. Staff has recommended approval of the plan as discussed. In addition, Staff has recommended that the Commission approve Trico's proposed \$2,000,189 2011 REST budget.

CONCLUSIONS OF LAW

1. Trico Electric Cooperative, Inc. is an Arizona public service corporation within the meaning of Article XV, Section 2, of the Arizona Constitution.

2. The Commission has jurisdiction over Trico Electric Cooperative, Inc. and over the subject matter of the Application.

3. The Commission, having reviewed the application and Staff's Memorandum dated December 23, 2010, concludes that it is in the public interest to approve the Trico 2011 REST Plan including the Renewable Energy Standard Tariff, Voluntary Renewable Energy Standard Program Tariff, and Renewable Energy Customer Self-Directed Tariff as specified in this order.

ORDER

IT IS THEREFORE ORDERED that the Trico Electric Cooperative, Inc. 2011 REST Plan be and is hereby approved as discussed herein.

IT IS THEREFORE ORDERED that the Trico Electric Cooperative, Inc. Renewable Energy Standard Tariff, Voluntary Renewable Energy Standard Program Tariff, Renewable Energy Customer Self-Directed Tariff, SunWatts Sun Farm Tariff be and is hereby approved until further Order of the Commission.

IT IS FURTHER ORDERED that Trico specify in its SunWatts Sun Farm Tariff the amount of the annual kWh credit to be received by customers who participate in the program.

IT IS FURTHER ORDERED that Trico shall not include the annual kWh output from the SunWatts Sun Farm as distributed generation per A.A.C. R14-2-1802(B).

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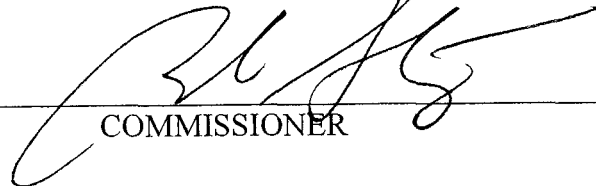
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1 IT IS FURTHER ORDERED that Trico Electric Cooperative, Inc. shall file with Docket
2 Control, as a compliance matter in this case, revised tariff pages consistent with the terms of the
3 Commission's Decision within 15 days from the effective date of the Decision.

4 IT IS FURTHER ORDERED that this Order shall become effective immediately.

5
6 **BY THE ORDER OF THE ARIZONA CORPORATION COMMISSION**

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CHAIRMAN

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COMMISSIONER

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COMMISSIONER

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COMMISSIONER

13 COMMISSIONER

14 IN WITNESS WHEREOF, I ERNEST G. JOHNSON,
15 Executive Director of the Arizona Corporation Commission,
16 have hereunto, set my hand and caused the official seal of
17 this Commission to be affixed at the Capitol, in the City of
18 Phoenix, this 19th day of JANUARY, 2011.

19 
20 ERNEST G. JOHNSON
21 EXECUTIVE DIRECTOR

22 DISSENT: 

23 DISSENT: _____

24 SMO:CLA:lh\RM

1 SERVICE LIST FOR: Trico Electric Cooperative, Inc.
2 DOCKET NO. E-01461A-10-0263

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GARY PIERCE - Chairman
BOB STUMP
SANDRA D. KENNEDY
PAUL NEWMAN
BRENDA BURNS



ERNEST G. JOHNSON
Executive Director

ARIZONA CORPORATION COMMISSION

Re: DISSENT
Trico Electric Cooperative
Docket # E-01-461A-10-0263

I dissent in the Commission's decision to adopt Trico Electric Cooperative's application for approval of its 2011 Renewable Energy Standard Tariff Implementation Plan because I have concerns about the impact that the proposed Renewable Energy Standard Tariff (REST) surcharge would have on certain residential and commercial rate-payers.

My concerns do not impact my feelings or regards for the company or cooperative utilities, in general. As a commissioner I recognize that my decisions are balanced by considerations of what are the best interests of the merchant and the customer.

However, the examples of monthly bill impacts (provided in the application) for various classes of customers were the basis of my dissenting vote.

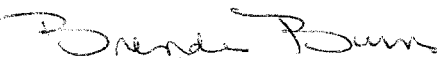
- A sample convenience store would see its monthly REST surcharge go from \$74.10 per month to \$130.00 per month.
- A sample grocery store would see its monthly REST surcharge go from \$74.10 per month to \$130.00 per month.
- A sample elementary school would see its monthly REST surcharge go from \$24.70 per month to \$43.00 per month.
- A sample residential customer would see its monthly REST surcharge go from \$2.00 per month to \$3.00 per month (a 50% increase).

Trico's 2010 budget was \$1,233,422. Its proposed budget for its 2011 REST Plan is \$2,000,189. That is an increase of 62%, which the ratepayers must account for.

Trico budgeted \$619,016 to help eliminate its current backlog of the reservation waiting list for rebate payments. A further \$200,000 in federal ARRA funding was budgeted to supplement that line item. However, if Trico had a backlog of more than \$1 million would that have been included in the budget? I am concerned about how we can effectively reduce backlogs while at the same time not hurting ratepayers who are subsidizing these programs.

I am cognizant that Trico wants to increase its budget for non-residential performance based incentives and reduce the backlog for rebate payments. However, I believe that the ARRA funding of \$200,000 and a lower surcharge would have been better ways to manage the increase in passed-on costs to the Trico customers.

Therefore, I dissent.


Brenda Burns